

CLAIMS

1. A cryptographic method during which an integer division of the type $q = a \text{ div } b$ and/or a
5 modular reduction of the type $r = a \text{ mod } b$ is performed,
with q a quotient, a a number of m bits, b a number of
n bits, n less than or equal to m and b_{n-1} non zero, b_{n-1}
being the most significant bit of the number b ,
characterised in that the number a is masked by a
10 random number ρ before performing the integer division
and/or the modular reduction.

2. A method according to Claim 1, during which,
in order to mask the number a , b times the random
number ρ ($a \leftarrow a + b * \rho$) is added to the number a .

15 3. A method according to Claim 1 or Claim 2 in
which, after having performed an integer division, the
contribution made by the random number ρ is taken away
from the result of the integer division.

20 4. A method according to Claim 3 in combination
with Claim 2, during which, in order to take away the
contribution made by the random number ρ , the said
random number ρ is subtracted from the result of the
integer division.

25 5. A method according to one of Claims 1 to 4,
during which the random number ρ is modified at each
implementation of the method.

6. A method according to one of Claims 1 to 4,
during which the random number ρ is modified after a
predetermined number of implementations of the method.

30 7. An electronic component comprising means for

implementing a method according to one of the preceding claims, the programmed calculation means comprising in particular several registers for storing the numbers a and b.

- 5 8. A chip card comprising a component according to the preceding claim.